





## Product

### Product description:

A light hand applied filler, suitable for wide filling, joints and ordinary filling indoors. The product has a good filling capacity and can be used on most substrates, on walls and ceilings before painting and wallpapering.

### Product specification

Packaging, 3-litre and 10-litre plastic buckets.

All calculations of the packaging material is made with the 10 liters bucket that represent the majority of the market.

Materials	Value	Unit
Acrylic copolymer	2,5-10	%
Cellulose derivate	1-5	%
1,2-benzisothiazol-3(2H)-one (BIT)	<1, Ref SDS	%
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	<1, Ref SDS	%
Water	20-50	%
Light-weight filler	1-5	%
Dolomite	40-50	%

### Technical data:

Binding agent: Latex co-polymer

Solvent: Water

Grain size: Max. 0.2 mm

pH: Approx. 9

Colour: Grey

### Market:

Europe

### Reference service life, product

Fillers have a limited shelf life and is date-marked. Unopened packaging can be kept in a dark place, free from frost, for up to 12 months. Containers that have been opened must be sealed well.

### Reference service life, building

The EPD does not cover the service life of the building.

## LCA: Calculation rules

### Declared unit:

1 kg Scotte LH+ (Beckers)

### Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

### Allocation:

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

### Data quality:

Specific data for the product composition are provided by the manufacturer. The data represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on EPDs according to EN 15804 and different LCA databases. The data quality of the raw materials in A1 is presented in the table below.

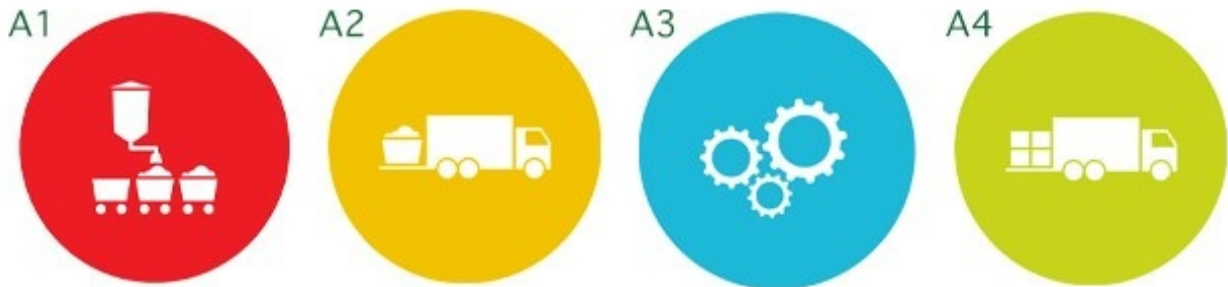
Materials	Source	Data quality	Year
Wet ready-mixed filler		EPD	2020

### System boundaries (X=included, MND=module not declared, MNR=module not relevant)

Product stage				Construction installation stage	Use stage										End of life stage				Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling-potential			
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D			
X	X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND			

#### System boundary:

A1-A4



#### Additional technical information:

Meets CE-marking requirements in accordance with EN 13963. Manufactured in accordance with ISO 9001 and ISO 14001. When treating plasterboards, follow recommendations in accordance with EN 13963. Nordic Ecolabel. M1. Basta.

## LCA: Scenarios and additional technical information














The following information describe the scenarios in the different modules of the EPD.

This EPD covers the following modules: A1 (Raw material supply), A2 (Transport) and A3 (Manufacturing), A4 (Transport).

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, over 32 tonnes, EURO 5	53,3 %	300	0,023	l/tkm	6,90

## LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

Environmental impact				
	Indicator	Unit	A1-A3	A4
	GWP-total	kg CO <sub>2</sub> -eq	1,91E-01	2,73E-02
	GWP-fossil	kg CO <sub>2</sub> -eq	2,52E-01	2,73E-02
	GWP-biogenic	kg CO <sub>2</sub> -eq	-6,21E-02	1,12E-05
	GWP-luluc	kg CO <sub>2</sub> -eq	4,11E-04	7,96E-06
	ODP	kg CFC11 -eq	2,60E-08	6,30E-09
	AP	mol H <sup>+</sup> -eq	2,24E-03	1,15E-04
	EP-FreshWater	kg P -eq	9,28E-06	2,08E-07
	EP-Marine	kg N -eq	3,21E-04	3,45E-05
	EP-Terrestrial	mol N -eq	3,20E-03	3,81E-04
	POCP	kg NMVOC -eq	1,05E-03	1,23E-04
	ADP-minerals&metals <sup>1</sup>	kg Sb -eq	4,55E-06	4,66E-07
	ADP-fossil <sup>1</sup>	MJ	5,41E+00	4,24E-01
	WDP <sup>1</sup>	m <sup>3</sup>	5,41E+01	3,25E-01

GWP-total = Global Warming Potential total; GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

"Reading example: 9,0 E-03 = 9,0\*10<sup>-3</sup> = 0,009"







\*INA Indicator Not Assessed

1. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

### Remarks to environmental impacts

Scotte LH+ is labeled with the Nordic Ecolabel, license no 3097 0002.

### Additional environmental impact indicators











	Indicator	Unit	A1-A3	A4
	PM	Disease incidence	1,54E-08	2,40E-09
	IRP <sup>2</sup>	kgBq U235 -eq	2,64E-02	1,85E-03
	ETP-fw <sup>1</sup>	CTUe	5,96E+00	3,10E-01
	HTP-c <sup>1</sup>	CTUh	4,30E-10	0,00E+00
	HTP-nc <sup>1</sup>	CTUh	4,67E-09	3,00E-10
	SQP <sup>1</sup>	dimensionless	5,55E+00	4,86E-01

PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Potential Soil Quality Index (dimensionless)

"Reading example: 9,0 E-03 = 9,0\*10<sup>-3</sup> = 0,009"

\*INA Indicator Not Assessed

1. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator
2. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.




Resource use				
	Indicator	Unit	A1-A3	A4
	PERE	MJ	1,00E+00	5,34E-03
	PERM	MJ	6,05E-01	0,00E+00
	PERT	MJ	1,61E+00	5,34E-03
	PENRE	MJ	4,44E+00	4,24E-01
	PENRM	MJ	1,29E+00	0,00E+00
	PENRT	MJ	5,73E+00	4,24E-01
	SM	kg	1,21E-02	0,00E+00
	RSF	MJ	1,13E-02	1,87E-04
	NRSF	MJ	6,64E-03	6,26E-04
	FW	m <sup>3</sup>	5,41E-03	4,83E-05

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary materials; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water

"Reading example: 9,0 E-03 = 9,0\*10-3 = 0,009"

\*INA Indicator Not Assessed








End of life - Waste				
Indicator		Unit	A1-A3	A4
	HWD	kg	6,44E-03	2,32E-05
	NHWD	kg	9,89E-02	3,69E-02
	RWD	kg	1,92E-05	2,90E-06

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

"Reading example: 9,0 E-03 = 9,0\*10<sup>-3</sup> = 0,009"

\*INA Indicator Not Assessed

End of life - Output flow				
Indicator		Unit	A1-A3	A4
	CRU	kg	0,00E+00	0,00E+00
	MFR	kg	4,50E-03	0,00E+00
	MER	kg	8,73E-05	0,00E+00
	EEE	MJ	7,98E-03	0,00E+00
	EET	MJ	1,21E-01	0,00E+00

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy electrical; EET = Exported energy thermal

"Reading example: 9,0 E-03 = 9,0\*10<sup>-3</sup> = 0,009"

\*INA Indicator Not Assessed

Biogenic Carbon Content		
Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	1,80E-02

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>

## Additional requirements

### **Greenhouse gas emissions from the use of electricity in the manufacturing phase**

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

### **Dangerous substances**

The product contains no substances given by the REACH Candidate list.

### **Indoor environment**

The product meets the requirements for low-emission materials (M1). Emission test performed by Eurofins according to the ISO 16000 standard.






## Additional Environmental Information

<b>Additional environmental impact indicators required in NPCR Part A for construction products</b>			
<b>Indicator</b>	<b>Unit</b>	<b>A1-A3</b>	<b>A4</b>
GWPIOBC	kg CO <sub>2</sub> -eq	2,59E-01	2,73E-02

GWPI-IOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

## Bibliography

ISO 14025:2010 Environmental labels and declarations - Type III environmental declarations - Principles and procedures.  
 ISO 14044:2006 Environmental management - Life cycle assessment - Requirements and guidelines.  
 EN 15804:2012+A2:2019 Environmental product declaration - Core rules for the product category of construction products.  
 ISO 21930:2017 Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products.  
 ecoinvent v3, (2019) Allocation, cut-off by classification, Swiss Centre of Life Cycle Inventories.  
 Iversen et al., (2021) eEPD v2021.09 Background information for EPD generator tool system verification, LCA.no Report number: 07.21  
 Iversen et al., (2020) EPD generator - Background information and LCA data for customer.  
 NPCR Part A: Construction products and services. Ver. 2.0, 24.03.2021 EPD Norway.  
 NPCR 009 Part B for technical-chemical products. Ver. 2.0 October 2021, EPD-Norge.

 <b>epd-norway</b> <small>Global Program Operator</small>	<b>Program operator and publisher</b> The Norwegian EPD Foundation Post Box 5250 Majorstuen, 0303 Oslo, Norway	Phone: +47 23 08 80 00 e-mail: <a href="mailto:post@epd-norge.no">post@epd-norge.no</a> web: <a href="http://www.epd-norge.no">www.epd-norge.no</a>
	<b>Owner of the declaration:</b> Tikkurila Oyj Heidehofintie 2, 01300 Vantaa	Phone: +358 20 191 2000 e-mail: <a href="mailto:epd-team@tikkurila.com">epd-team@tikkurila.com</a> web: <a href="http://www.tikkurilagroup.com">www.tikkurilagroup.com</a>
	<b>Author of the Life Cycle Assessment</b> LCA.no AS Dokka 6B, 1671	Phone: +47 916 50 916 e-mail: <a href="mailto:post@lca.no">post@lca.no</a> web: <a href="http://www.lca.no">www.lca.no</a>
	<b>Developer of EPD generator</b> LCA.no AS Dokka 6B,1671 Kråkerøy	Phone: +47 916 50 916 e-mail: <a href="mailto:post@lca.no">post@lca.no</a> web: <a href="http://www.lca.no">www.lca.no</a>
	ECO Platform ECO Portal	web: <a href="http://www.eco-platform.org">www.eco-platform.org</a> web: ECO Portal